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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,659	12/08/2003	Ekaterina Ponomarenko	CM2569CQ	4858

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EXAMINER

FORTUNA, JOSE A

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/730,659

Applicant(s)

PONOMARENKO ET AL.

Examiner

José A Fortuna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 13-24 is/are rejected.
- 7) ☒ Claim(s) 2 and 10-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 04/04; 03/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 is vague and indefinite as to what are the members of the Markush group or what are the steps that can be repeated, e.g., are “forming the web” and “disintegrating the web,” two different members of the group?

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-9, 13-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Audett et al., WO 92/11322, referred hereafter as Audett.

Regarding claims 1, 3, 13 and 18, Audett teaches the use of a polymeric resin capable of forming crosslinking bonds when impacted by radiation energy on a fibrous web, such as paper, paperboard, tissues, wet wipes, etc, see page 11, lines 16-33; page 29, line 32 through page 30, line 16, page 31, lines 15-30 and page 34, line 37 through page 35, line 30. Regarding claims 4-5, Audett teaches the same radiation activatable groups as

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claimed and same polymeric backbones, see page 19, line 35 through page 21, line 25; page 22, lines 17-33; also page 11, line 16 through page 13, line 15. Regarding claims 6-7, the amount of resin on the fibrous web falls within the claimed range, see column 28, lines 25-39. Regarding claims 9 and 23, Audett teaches that the resins are cured by exposing it to radiation energy, such as UV, EB, see abstract and page 11, lines 16-33. Regarding claims 14-15, 21-22 and 24, Audett teaches that the resin is either selectively cured to form a pattern or applied to preselected region to form a pattern, see page 35, lines 14-30. Regarding claims 17-18, Audett discloses the use of the coated fibrous web as wet wipes tissues, diapers, etc., see page 35, lines 21-30. Regarding claims 19-20, Audett teaches that the fibrous web is taken to a coating station where the web is coated and then transported to the converting plant, see examples.

5. Claims 1, 3-9, 13-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Kellen et al., US Patent No. 4,737,559, referred hereafter as Kellen.

Regarding claims 1, 3-9, 13-24, Kellen teaches a pressure sensitive adhesive that could be used coat fibrous web/sheets, such as paper, woven and non-woven fabrics, etc. Kellen teaches the same type of backbone monomers, monomer A, column 5, lines 8-23, which are polymerized with mono-ethylenically unsaturated aromatic ketone, monomer B. The aromatic ketone provides the capability of crosslinking the polymer by radiation energy, see abstract. Note that ketone copolymers are the same as claimed, benzophenone, column 4, lines 52-58 and column 5, line 30 through column 5, line 9. Kellen teaches in column 6, line 55 through column 7, line 50, that the coating can be applied to woven and non-woven fabrics that can be formed of threads of synthetic and

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natural materials such as cotton, nylon, polyester and the like, column 6, lines 64-66, and in column 7, lines 19-24, Kellen teaches the use for absorbent products such as wound dressing, drapes or the like, including multi-layered pads.

Claims 1, 3-9, 13-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hintze et al., DE 3836370 or Romer et al., EP 0024703, both cited on the Information Disclosure Statement filed on April 30 2004.

Both, Romer et al. and Hintze et al., teach the coating of fibrous materials using UV curable resins. Romer et al. teach a filter paper, for oil and/or air that is impregnated with a solution/dispersion of at least one resin that is curable by electron radiation. They teach that the concentration of the resin in the dispersion/solution is from 1-50% and that the solvent is removed by evaporation and the resin is cured on the substrate, see abstract, attached. Hintze et al. teach a process for coating wood, wood materials and paper using a radiation curable coating, see abstract attached. Hintze et al. teaches the same backbone monomers as claimed along with same monomers that affect the curing by radiation.

***Allowable Subject Matter***

6. Claims 2 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach the use of the claimed radiation curable resins in cellulose fibers which are curled, crimped or twisted, nor the used of a non radiation curable crosslinking agent along with the radiation curable resins, as claimed.

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***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of "Use of radiation curable resins on fibrous webs."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jose A Fortuna  
Primary Examiner  
Art Unit 1731

JAF